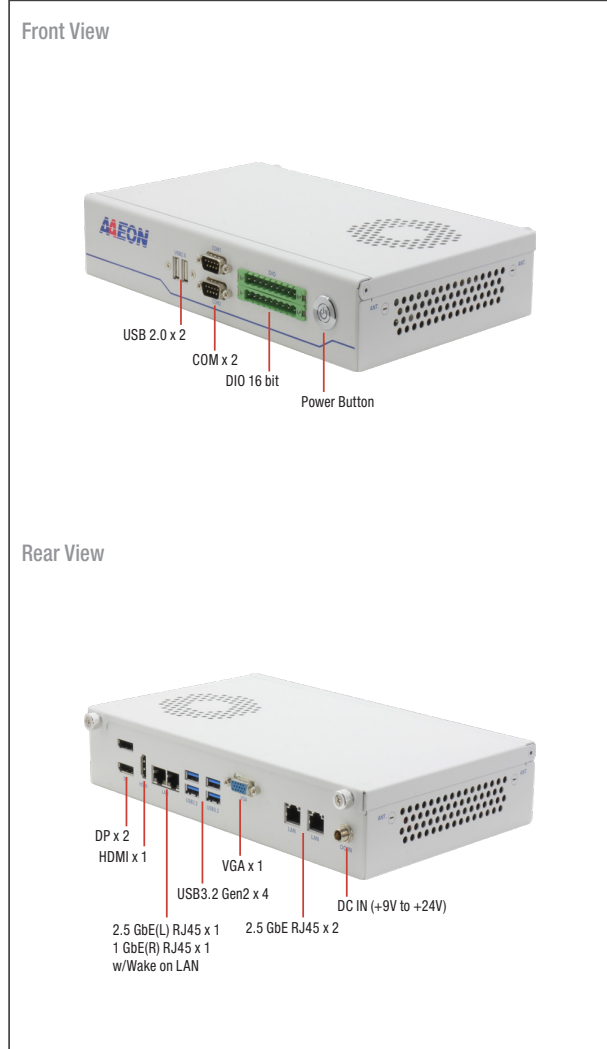


# EPIC-TGH7-PUC

EPIC System with 11th Generation Intel® Core™/Intel® Xeon® W Series Processors

EPIC Boards



## Features

- Onboard 11th Gen Intel® Core™/Intel® Xeon® W Series Processors
- Intel® 500 Series Chipset (RM590E/HM570E)
- DDR4 3200 SODIMM x 2, up to 64GB
- HDMI 2.0b x 1, DP++ 1.2a x 2, VGA x 1
- SATA III x 2
- RJ45 2.5 GbE x 3, RJ45 GbE x 1
- USB 3.2 Gen 2 x 4, USB 2.0 x 2
- M.2 3052 B-Key x 1, M.2 2280 M-Key x 1, Mini Card x 1
- COM Port x 2, DIO 16-bit x 1
- +9V ~ +24V Wide Voltage Input Support

Display	
Controller	Intel® UHD Graphics for 11th Gen Intel® Processors
LVDS/eDP	—
Display Interface	VGA x 1, up to 1920 x 1080 DP++ 1.2 x 2, up to 3840 x 2160 @60Hz HDMI 2.0 x 1, up to 3840 x 2160 @60Hz
Multiple Display	Up to 4 Simultaneous Displays
Audio	
CODEC	—
Audio Interface	—
Speaker	—
External I/O	
Ethernet	Intel® I226, 2.5GbE RJ-45 x 2 Intel® I225, 2.5GbE RJ-45 x 1 Intel® I219, GbE RJ-45 x 1 (Wake on LAN support for Intel® I219 x 1 + Intel® I225 x 1)
USB	USB 3.2 Gen 2 x 4 USB 2.0 x 2
Serial Port	COM 1 ~ COM 2 (RS-232/422/485, RI as default, 5V/12V selected by BOM change)
Video	VGA x 1, up to 1920 x 1080 DP++ 1.2a x 2, up to 3840 x 2160 @60Hz HDMI 2.0b x 1, up to 3840 x 2160 @60Hz
Internal I/O	
USB	—
Serial Port	—
Video	—
SATA	SATA III x 2 +5V SATA Power Connector x 1 (Total up to 5V @2A, up to 5V @1A, shared with 2.5"SSD x 2 as limitation with 170X000592)
Audio	—
DIO/GPIO	GPIO 16-bit
SMBus/I2C	—
Touch	—
Fan	4 Pin Smart Fan
SIM	Nano SIM x 1
Front Panel	Power Button, Power LED
Others	—
Expansion	
Mini PCI-E/mSATA	Half Size mSATA/mPCIe x 1 (Default: mPCIe, selected by BIOS)
M.2	M.2 2280 M-Key x 1 (PCIe 4.0 [x4] x 1) M.2 3052 B-Key x 1 (PCIe 3.0 [x2] + USB 3.2 + USB 2.0)
Others	—
Environment	
Operating Temperature	32°F ~ 122°F (0°C ~ 50°C) with 0.5m/sec air flow
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	250,817
EMC	CE/FCC Class A

## Specifications

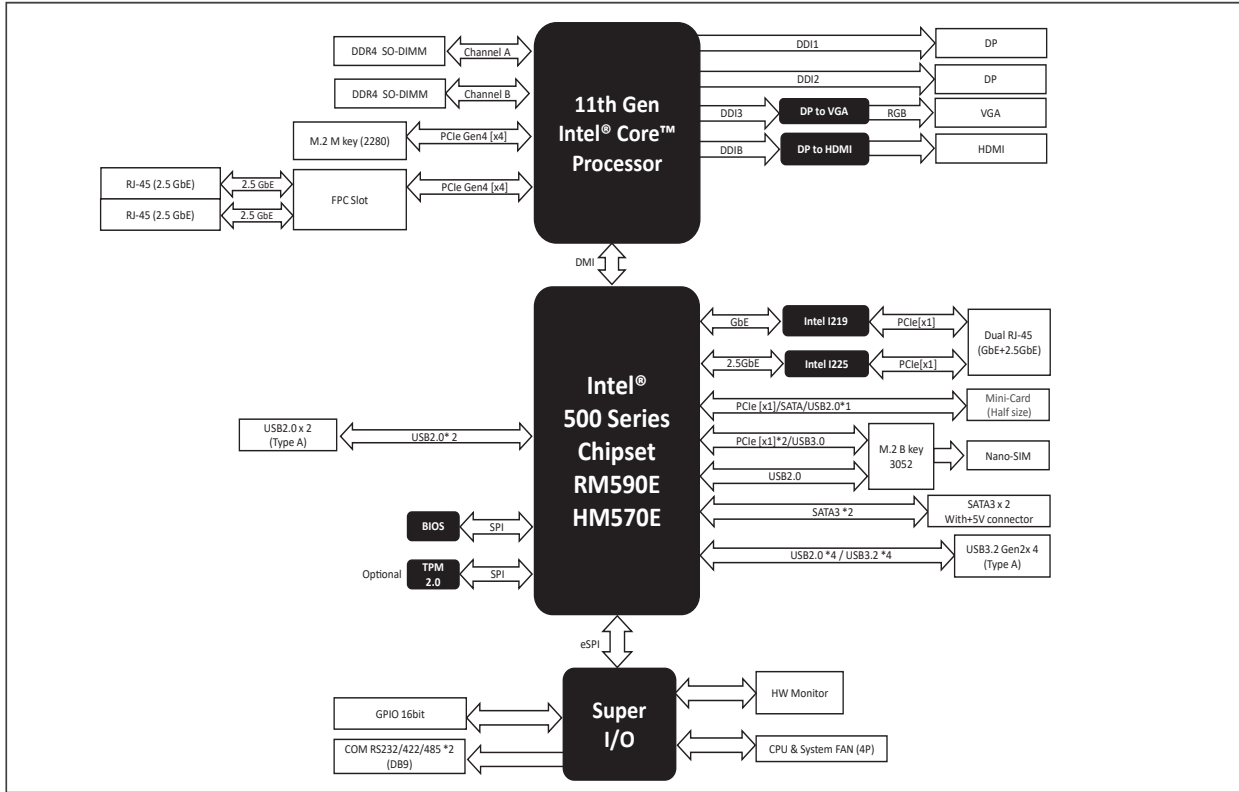
System	
Form Factor	EPIC System
CPU	11th Generation Intel® Xeon/Core™ Processor : Intel® Core™ i7-11850HE (8C/16T, 2.60GHz, 45W) Intel® Xeon® W-11865MRE (8C/16T, 2.60GHz, 45W)
Chipset	Intel® 500 Series Mobile Chipsets (RM590E/HM570E)
Memory Type	DDR4 3200, Dual-Channel SODIMM x 2, Max 64GB (ECC supported by Intel® Xeon® only)
BIOS	UEFI
Wake On Lan	Yes
Watchdog Timer	255 Levels
Security	TPM 2.0 (Optional)
RTC Battery	Lithium Battery 3V/240mAh
Dimension	10.2" x 6.3" x 1.9" (260mm x 160mm x 50mm)
OS Support	Windows 10 (64bit) Ubuntu20.04.5 / Kernel 5.15.0-46-generic x86_64
Power	
Power Requirement	+9V to +24V
Power Supply Type	AT/ATX
Connector	DC Jack Connector
Power Consumption	Intel® Xeon® W-11865MRE, DDR4 32GB x 2, 8.32A @12V, 99.84W (Typical) Intel® Xeon® W-11865MRE, DDR4 32GB x 2, 12.52A @12V, 150.24W (Max)

# EPIC-TGH7-PUC

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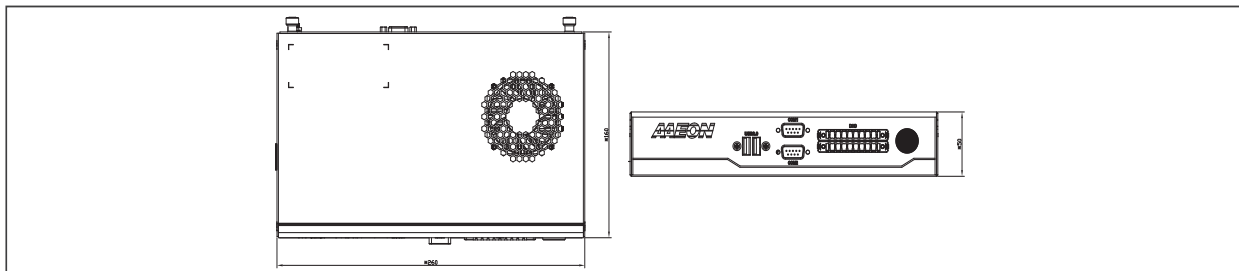
EPIC Boards

## Block Diagram



## Dimension

Unit: mm



## Ordering Information

Part Number	CPU	Memory	Display	Storage	LAN	USB	COM Port	Expansion	Power	Operating Temperature	Others
EPIC-TGH7-PUC-A10-0001	Intel® Xeon® W-11865MRE (with RM590E)	DDR4 SODIMM x2	DP x 2 HDMI x 1 VGA x 1	SATA3 x 2	2.5GbE x 3 GbE x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 2	RS232/422/485 x 2	M.2 3052 B-key x 1 M.2 2280 M-key x 1 MiniCard (Half Size) x 1	+9V to +24V DC Jack Connector	0°C ~ 50°C	GPIO 16 bits Nano SIM x 1
EPIC-TGH7-PUC-A10-0002	Intel® Core™ i7-11850HE (with HM570E)	DDR4 SODIMM x2	DP x 2 HDMI x 1 VGA x 1	SATA3 x 2	2.5GbE x 3 GbE x 1	USB 3.2 Gen 2 x 4 USB 2.0 x 2	RS232/422/485 x 2	M.2 3052 B-key x 1 M.2 2280 M-key x 1 MiniCard (Half Size) x 1	+9V to +24V DC Jack Connector	0°C ~ 50°C	GPIO 16 bits Nano SIM x 1

## Packing List

- EPIC-TGH7-PUC x 1
- SATA Cable x 2
- Dual SATA Power Cable x 1
- Screw , thermal pads and accessories kit x 1

## Optional Accessories

Part Number	Description	QTY
1702031803	Power cord for EU	1
1702031802	Power cord for US	1
170203180J	Power cord for UK	1
170203180E	Power cord for Japan	1
170203180B	Power cord for China	1
1702031811	Power cord for Taiwan	1
1702150155	2 Pin SATA Power Cable, 15cm	1
1255X00063	AC/DC Adapter:150W.12V/12.5A.DC JACK W/Lock , Delta DPS-150AB-15 J	1

Note: All specifications are subject to change without notice.

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## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508  
Support: +1 347 719 4508

1309 Coffeen Ave  
Ste 1200  
Sheridan  
WY 82801  
USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050  
Support: +44 (0)1785 879 050

Unit A5 Douglas Park  
Stone Business Park  
Stone  
ST15 0YJ  
United Kingdom

VAT Number: 120 9546 28  
Business Registration Number: 07699660